U. S. PLANT PATENT APPLICATION OF

CORNELIS ARIE HOOGENDOORN

FOR: ALSTROEMERIA PLANT NAMED

'ZALSAREST'

TITLE: ALSTROEMERIA PLANT NAMED 'ZALSAREST'

APPLICANT: CORNELIS ARIE HOOGENDOORN

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

Alstroemeria hybrida cultivar Zalsarest

BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of Alstroemeria plant, botanically known as *Alstroemeria hybrida*, commercially used as a cut flower Alstroemeria, and hereinafter referred to by the name 'Zalsarest'.

The new Alstroemeria is a product of a planned breeding program conducted by the Inventor in Hillegom and Rijnsburg, The Netherlands. The objective of the breeding program was to develop new cut flower Alstroemeria cultivars with desirable flower and plant qualities, attractive flower colors and excellent postproduction longevity.

The new Alstroemeria originated from a cross-pollination made by the Inventor in June, 1996 in Hillegom, The Netherlands, of a proprietary *Alstroemeria hybrida* selection identified as 95299-4, not patented, as the female, or seed, parent with a proprietary *Alstroemeria hybrida* selection identified as 86021-7B, not patented, as the male, or pollen, parent. The new Alstroemeria was discovered and selected by the Inventor as a

flowering plant within the progeny of the stated cross-pollination in a controlled environment in Rijnsburg, The Netherlands in June, 1997.

Asexual reproduction of the new cultivar by root divisions taken in a controlled environment in Hillegom, The Netherlands, since September, 1997, has shown that the unique features of this new Alstroemeria are stable and reproduced true to type in successive generations of asexual propagation.

SUMMARY OF THE INVENTION

Plants of the cultivar Zalsarest have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature and light intensity without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Zalsarest'. These characteristics in combination distinguish 'Zalsarest' as a new and distinct cultivar:

1. Erect and strong flowering stems.
2. Vigorous growth habit.
3. White-colored flowers.
4. Good postproduction longevity.

Plants of the new Alstroemeria can be compared to plants of the female parent selection. In side-by-side comparisons conducted in Rijnsburg, The Netherlands, plants of the new Alstroemeria differed from plants of the female parent selection in the following characteristics:

1. Plants of the new Alstroemeria had shorter flowering stems than plants of the female parent selection.
2. Outer perianths of plants of the new Alstroemeria had more green coloration than outer perianths of plants of the female parent selection.

Plants of the new Alstroemeria can be compared to plants of the male parent selection. In side-by-side comparisons conducted in Rijnsburg, The Netherlands, plants of the new Alstroemeria differed from plants of the male parent selection in the following characteristics:

1. Plants of the new Alstroemeria produced more flowering stems per year than plants of the male parent selection.
2. Outer perianths of plants of the new Alstroemeria had more green coloration than outer perianths of plants of the male parent selection.

Plants of the new Alstroemeria can be compared to plants of the cultivar Stabec, disclosed in U.S. Plant Patent number 9,041. In side-by-side comparisons conducted in Rijsenhout, The Netherlands, plants of the

new Alstroemeria differed from plants of the cultivar Stabec in the following characteristics:

1. Plants of the new Alstroemeria produced more flowering stems per year than plants of the cultivar Stabec.
2. Plants of the new Alstroemeria had fewer flowers per inflorescence than plants of the cultivar Stabec.
3. Plants of the new Alstroemeria had white-colored flowers whereas plants of the cultivar Stabec had red and white bi-colored flowers.
4. Plants of the new Alstroemeria had shorter peduncles and pedicels than plants of the cultivar Stabec.

BRIEF DESCRIPTION OF THE PHOTOGRAPH

The accompanying colored photograph illustrates the overall appearance of the new Alstroemeria, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photograph may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new Alstroemeria. The photograph comprises a side perspective view of a typical flowering stem of 'Zalsarest'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph, following observations and measurements describe plants of the new Alstroemeria grown in Rijsenhout, The Netherlands in a glass-covered greenhouse in ground beds. During the production of the plants, day temperatures ranged from 15 to 25°C, night temperatures ranged from 10 to 15°C and light levels averaged 5,000 lux. Plants used for the photograph and description were about one year old. The photograph and the description were taken during August and September, 2002. Color references are made to the Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

BOTANICAL CLASSIFICATION:

Alstroemeria hybrida cultivar Zalsarest.

PARENTAGE:

Female parent: Proprietary *Alstroemeria hybrida* selection identified as 95299-4, not patented.

Male parent: Proprietary selection of *Alstroemeria hybrida* identified as 86021-7B, not patented.

PROPAGATION:

Type: By root divisions.

Root description: Fibrous, fleshy, thick; white, close to 155D, in color.

Rooting habit: Freely branching.

Rhizomes:

Shape: Elongate; rounded.

Length: About 10 to 30 cm.

Diameter: About 3 to 10 mm.

Texture: Smooth.

Color: Close to 155D.

PLANT DESCRIPTION:

Plant habit: Upright; freely branching, bushy appearance. Vigorous growth habit.

Time from planting to harvest of cut flowers: About 80 to 90 days.

Number of flowering stems produced per year: About 224 to 260.

Plant height: About 125 to 175 cm.

Plant diameter (spread): About 20 to 30 cm.

Flowering stem description:

Aspect: Erect.

Length: About 150 cm.

Diameter: About 4.6 to 8 mm.

Internode length: About 0.5 to 4 cm.

Strength: Strong.

Texture: Glabrous.

Color: Close to 144A.

Foliage description: Leaves asymmetrical; sessile.

Length: About 14 to 16 cm.

Width: About 2.5 to 2.9 cm.

Shape: Linear to lanceolate.

Apex: Acute.

Base: Attenuate.

Margin: Entire.

Texture, upper and lower surfaces: Smooth, glabrous.

Venation pattern: Parallel.

Color:

Developing and fully developed foliage, upper surface: Close to 137A; slightly glossy.

Developing and fully developed foliage, lower surface: Close to 137C.

Venation: Upper surface, close to 137A; lower surface, close to 137C.

FLOWER DESCRIPTION:

Flower type and habit: Single cup-shaped flowers arranged in compound umbels. Perianth segments separate. Freely and continuously flowering. Flowers not persistent.

Natural flowering season: Flowering continuous during the spring in The Netherlands.

Fragrance: None detected.

Flower longevity on the plant: About four weeks.

Flower longevity as a cut flower: About 16 days.

Flower buds (showing color):

Length: About 3 to 4 cm.

Diameter: About 1.5 to 2 cm.

Shape: Roughly ovoid.

Color: Whitish green.

Umbel length: About 12 to 16 cm.

Umbel diameter: About 21 to 28 cm.

Number of flowers per umbel: About 6 to 10.

Flower length (height): About 7.5 to 8 cm.

Flower diameter: About 8.5 to 9 cm.

Flower depth: About 7 to 7.5 cm.

Perianth:

Arrangement: Six arranged in two whorls, each whorl with two lateral and one median segments.

Size, inner perianth segments:

Length: Laterals, about 7 to 7.5 cm; median, about 6 to 6.5 cm.

Width: Laterals, about 1 to 2.5 cm; median, about 2 to 2.5 cm.

Size, outer perianth segments:

Length: Laterals, about 5 to 6 cm; median, about 6 to 7 cm.

Width: Laterals, about 2.5 to 3.5 cm; median, about 3.5 to 4 cm.

Shape, inner perianth, all segments: Oblanceolate.

Shape, outer perianth, all segments: Obovate.

Apex, inner perianth, all segments: Acute.

Apex, outer perianth, all segments: Bracket-shaped.

Base, inner and outer perianths, all segments: Attenuate.

Margin, inner and outer perianths, all segments: Entire; weakly undulate.

Texture, inner and outer perianths, all segments: Smooth, glabrous; velvety.

Color, inner perianth, lateral tepals:

When opening and fully opened, upper surface: 155C to 2D; apex tip, green; spots and stripes, close to 187A.

When opening and fully opened, lower surface: 155C to 2D.

Color, inner perianth, median tepal:

When opening and fully opened, upper surface: 155C; apex tip, green; spots and stripes, close to 187A.

When opening and fully opened, lower surface: 155C; apex tip, green.

Color, outer perianth, lateral tepals:

When opening and fully opened, upper surface: 155C; apex tip, green; few spots and stripes, close to 187A.

When opening and fully opened, lower surface: 155C; apex tip, green.

Color, outer perianth, median tepal:

When opening and fully opened, upper surface: 155C; apex tip, green; occasional spots and stripes, close to 187A.

When opening and fully opened, lower surface: 155C; apex tip, green.

Peduncles:

Length: About 6 to 10 cm.

Diameter: About 2 to 3 mm.

Strength: Strong.

Angle: About 30° from vertical.

Texture: Smooth, glabrous.

Color: Close to 137A.

Pedicels:

Length: About 1.5 to 2.5 cm.

Diameter: About 2 to 3 mm.

Strength: Strong.

Angle: About 30° from vertical.

Texture: Smooth, glabrous.

Color: Close to 137A.

Reproductive organs:

Stamens:

Quantity per flower: Six.

Anther shape: Elliptical, flat.

Anther length: About 8 mm.

Anther diameter: About 3 mm.

Anther color: Close to 197A.

Pollen amount: Abundant.

Pollen color: Close to 202A.

Pistils:

Quantity per flower: One.

Style length: About 4 to 5 cm.

Style color: White to very light pink.

Ovary color: Close to 141B.

Fruit:

Shape: Globular.

Color: Brownish.

DISEASE/PEST RESISTANCE:

Plants of the new Alstroemeria have not been observed to be resistant to pathogens and pests common to Alstroemerias.

TEMPERATURE TOLERANCE:

Plants of the new Alstroemeria have been observed to tolerate temperatures from -5 to 40°C.